

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Ely Field Office
HC 33 Box 33500 (702 No. Industrial Way)
Ely, Nevada 89301-9408
<http://www.nv.blm.gov/>

In Reply Refer To:
3160 (NV-043)
NV-040-03-037
N76790

Dear Interested Party:

Enclosed is the full force in effect Decision Record/Finding of No Significant Impact (DR/FONSI) for the Noble Energy, Inc. oil and gas drilling project. The supporting Environmental Assessment (EA NV-040-03-037) is available on the Ely Field Office website: http://www.nv.blm.gov/ely/nepa/ea_list.htm.

Implementation of the proposed action will allow Noble Energy, Inc. to exercise its rights under the lease agreement to explore for additional reserves of oil and gas so as to meet the increasing energy needs of this Nation. Any impacts resulting from the proposed action will be minimized through the carefully planned proposed action developed in the APD, the standard State and Federal operating regulations for oil and gas exploration, and the conditions of approval.

This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations at 43 CFR, Part 4. If an appeal is taken, your appeal must be filed with the Bureau of Land Management, Ely Field Office, HC33 Box 33500, Ely, Nevada, 89301, within 30 days from receipt of this decision. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition pursuant to regulation 43 CFR 4.21 or 43 CFR 3000.4 for a stay (suspension) of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. Copies of the notice of appeal and petition for a stay must also be submitted to the Interior Board of Land Appeals, Office of Hearings and Appeals, 4015 Wilson Boulevard, Arlington, VA 22203, and to the Office of the Solicitor, U.S. Department of the Interior, Suite 6201, Federal Bldg., 125 South State St., Salt Lake City, Utah, 84138, at the same time the original documents are filed with this office.

If you request a stay, you have the burden of proof to demonstrate that a stay should be granted. A petition for a stay of a decision pending appeals shall show sufficient justification based on the following rules:

- (1) The relative harm to the parties if the stay is granted or denied,
- (2) The likelihood of the appellant's success of the merits,

- (3) The likelihood of immediate and irreparable harm if the stay is not granted, and
- (4) Whether the public interest favors granting the stay.

Thank you for your participation in this EA and your interest in public lands. If you have any questions, please contact Bill Wilson at (775) 289-1882.

Sincerely,

Jeffrey Weeks
Assistant Field Manager
Non Renewable Resources

Enclosure:
Noble Energy, Inc. EA and DR/FONSI

WWilson:ww

**Decision Record
And
Finding of No Significant Impact
For
Noble Energy, Inc.
Rattlesnake Federal 12-26**

Lease No. N76790

NV-040-03-037

Decision: It is my decision to authorize the Noble Energy, Inc. well located in White Pine County and described in the proposed action of the Environmental Assessment (EA). I concur with my staff's assessment of the environmental impacts and authorize the proposed action subject to the standard stipulations that are a part of State and Federal operating regulations; the Egan Resource Management Plan, Oil and Gas Leasing Amendment and Record of Decision, Appendix A; and the site-specific conditions of approval (COAs) as listed below:

COAs

1. All topsoil stockpiles and newly created road berms will be seeded immediately with the interim topsoil seed mix in Attachment 4 of the EA to help prevent establishment of invasive, non-native weeds. An additional interim seeding may be required if the initial seeding is not successful.
2. The final reclamation seed mix as shown in Attachment 5 of the EA will be planted between October 1 and March 15, following final grading of the pad and reserve pit, and will utilize a well prepared seed bed. Substitutions for plant species that may not be available or slight modifications of the planting times will be negotiated with the Ely Field Office BLM. The entire well pad will be fenced and will remain fenced until revegetation is determined to be successful.
3. Reclamation will include performance standards for revegetation success such that the reclaimed area will have at least 20% perennial canopy cover. The site will be evaluated by the Ely BLM for vegetative progress after at least one full growing season. If not successful, Noble Energy, Inc. and the BLM reclamation specialist will review the reclamation procedures to decide on the best course of action to achieve success.
4. Noble Energy, Inc. will be responsible for the removal of any noxious weeds established within the project area until vegetation has been successfully reestablished, which may be as many as three years after final seeding. A list of noxious weeds is shown in Attachment 6 of the EA.

5. Noxious weeds, which may be introduced due to soil disturbance and reclamation, will be treated by methods to be approved by the authorized officer. These methods may include biological, mechanical, or chemical. Should chemical methods be approved, the lessee must submit a Pesticide Use Proposal to the authorized officer 60 days prior to the planned application date.

6. Noble Energy, Inc. will ensure that all vehicles and equipment coming onto the site are properly cleaned prior to entering the project area so as not to spread potential noxious weeds from a previous location.

7. Noble Energy, Inc. will be responsible for the construction and removal of the reserve pit fence and, if built, the reclamation fence around the well pad. Fence construction diagrams are shown in Attachment 3 of the EA.

8. The well site area will be kept clean and free of trash. Every measure will be taken to keep the area around the well site free of any contaminants that could enter the groundwater water source.

9. Operations commencing during the period May 1 to July 15 will be subject to the provisions of the Ely District policy management actions for the conservation of migratory birds. BLM wildlife biologists will survey the area for nesting birds. If any are found, operations will be postponed until after July 15.

10. A water well may be accepted by the Ely District upon completion of operations. Please submit the following information to the Ely District Office, Bureau of Land Management, HC 33, Box 33500, Ely, NV 89301-9408:

- a. Water Analysis
- b. Type of inside diameter of casing used in well
- c. Total depth of well
- d. Depth of concrete seal
- e. Depth of static water level
- f. Water bearing formation or description of aquifer

Monitoring

Monitoring will consist of periodic compliance inspections of the area during the life of the drilling operation by an authorized officer of the BLM. This monitoring will consist of checks on initial location of facilities, compliance with Federal regulations, and the status of any reclamation. Periodic checks for establishment of noxious weeds will also occur during these site visits.

Rationale: Implementation of the proposed action will allow Noble Energy, Inc. to exercise its rights under the lease agreement to explore for additional reserves of oil and gas so as to meet the increasing energy needs of this Nation. Any impacts resulting from the proposed action will be minimized through the carefully

planned proposed action developed in the APD, the standard State and Federal operating regulations for oil and gas exploration, and the site specific conditions of approval as listed above. As a result of the analysis for the proposed Oil and Gas Well, it was determined that the proposed action will not result in unnecessary or undue degradation to the public lands. The proposed action is in conformance with the Egan Resource Management Plan and is consistent with the White Pine County Land Use Plan (1988).

FONSI: Based on the analysis of Environmental Assessment NV-040-03-037, I have determined that the quality of the human environment will not be significantly impacted as a result of this decision. Therefore, an Environmental Impact Statement is not required.

Rationale: This finding of no significant impact is based on the following. There are no unique or unknown risks that will occur as a result of this proposed action. There are no significant effects, either beneficial or adverse, that will result as a consequence of the proposed action. The proposed action will not affect unique characteristics of the geographic area. The proposed action will not adversely affect sites that are in or eligible for listing in the National Register of Historic Places, or may cause loss or destruction of significant scientific, cultural, or historical resources. There are no endangered or threatened species or habitat that will be affected by the proposed action.

Jeffrey Weeks
Assistant Field Manager
Nonrenewable Resources

Date



ENVIRONMENTAL ASSESSMENT

NV-040-03-037

APPLICATION FOR PERMIT TO DRILL

NOBLE ENERGY, INC.

LEASE NO. N-76790

WELL

Rattlesnake Federal 12-26

LOCATION: NEWARK VALLEY

WHITE PINE COUNTY, NEVADA

PREPARED BY

BUREAU OF LAND MANAGEMENT
ELY FIELD OFFICE

AUTHOR

William R. Wilson

October 2003

I. BACKGROUND INFORMATION

Introduction

On September 25, 2003, Noble Energy, Inc. submitted an Application for Permit to Drill (APD) for an oil and gas well, Rattlesnake Federal 12-26, located in Section 26, T. 22 N., R. 55E., MDBM. The proposed wildcat well is on Oil and Gas Lease N76790 approximately 60 miles northwest of Ely, White Pine County, Nevada - Figure 1. A pre-drill, onsite, inspection was held on September 18, 2003, with Brent Murphy of Noble Energy, Inc., Brian Wood of Permits West, several dirt work contractors, and BLM personnel Nathan Thomas, John Stout, and Bill Wilson.

The project area is along the western edge of the Newark Valley playa. Two oil wells have been drilled and abandoned approximately 8 miles north of the proposed hole as shown on Figure 2. One reported oil and gas “shows”. Several geophysical surveys, including one by Noble Energy, have been permitted in the area.

Drilling operations within present leases cannot be cancelled by the denial of an APD. The Mineral Leasing Law of 1920, as amended, allows areas to be leased for oil and gas exploration and development. Leasing areas are developed through BLM’s planning process. The individual who has the lease has the right to drill for oil and gas within that lease. The right to drill for oil on the lease also gives them a right to reach the proposed well site by a road route, the location of which has to be reasonable and cause no undue degradation to the environment.

Should a discovery be made, additional wells are usually drilled to delineate a field and subsequent production plan. NEPA analyses would be conducted for this additional development, if and when it is proposed. This NEPA analysis, however, will evaluate both the exploration drilling and production of “Rattlesnake Federal 12-26”, if successful and desirable, subject to existing oil and gas regulations.

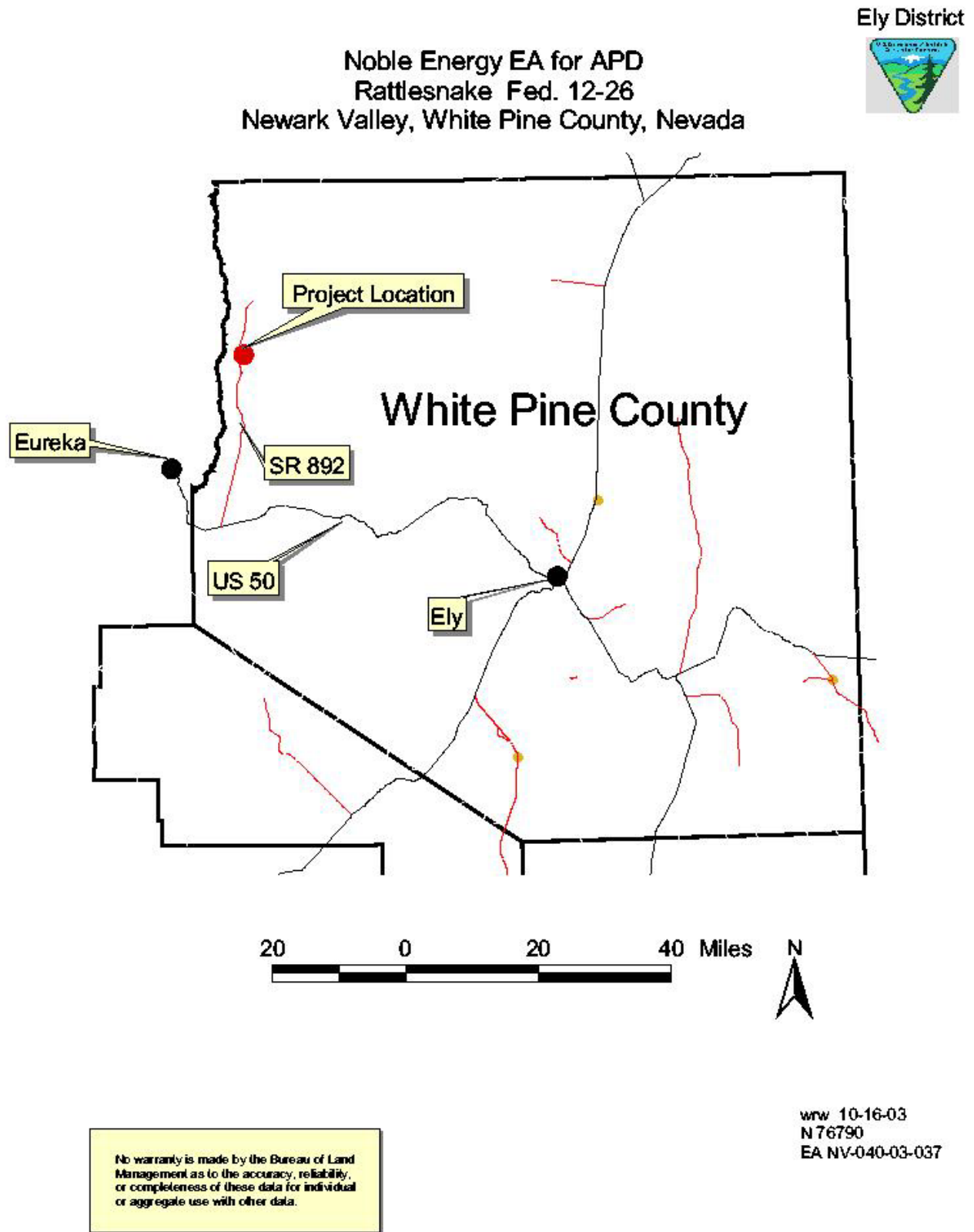
Need for the Proposal

The need is for a private corporation to seek an economic use of the public lands by drilling an exploratory well for oil and gas under appropriate Federal leases in the attempt to help meet the increasing demand for oil and gas in the United States.

Relationship to Planning

The Proposed Action is in conformance with the Proposed Egan Resource Management Plan (RMP) and Final Environmental Impact Statement (FEIS), September 21, 1984, which states “the public lands shall remain open and available for mineral exploration and development unless withdrawal or other administrative action is clearly justified in the national interest” (page 15). This EA is tiered to the Egan Resource Management Plan; Oil and Gas Leasing Amendment and Record of Decision, May 1994, which specifically incorporates oil and gas leasing into the land use plan.

Figure 1. Location Map



The Egan Resource Management Plan; Proposed Oil and Gas Leasing Amendment and Final Supplemental Environmental Impact Statement, August, 1993, analyzes impacts, including cumulative impacts, for actions such as the proposed action – wildcat oil and gas well drilling. That document is incorporated by reference into this environmental analysis. The document is available at the Ely Field Office, Bureau of Land Management in Ely, Nevada.

The White Pine County Land Use Plan (LUP) (May 1998) does not specifically address oil and gas leasing. However, the proposed action is consistent with this LUP, which encourages exploration and development for mineral resources.

Issues

No issues were identified during internal scoping in relationship to the proposed drilling and potential production of this oil and gas well.

II. DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

Proposed Action

Noble Energy, Inc. proposes to drill a wildcat oil and gas well in T22N, R55E section 26, approximately 60 miles northwest of Ely, White Pine County, Nevada. Drilling operations would commence in the fall of 2003, depending on weather and rig availability, and are expected to be completed within approximately one to two months. If the hole were dry, it would be immediately plugged and abandoned. Reclamation would be completed in approximately two to three years.

Should the well be successful, production operations would last for several years. Unless they involve additional disturbance for which additional NEPA analysis is required, production operations are generally handled through Sundry Notices and associated permitting. Typical activities include development of the well, installation of pumping and storage facilities, hauling of the oil to a process facility – usually one to two tanker truckloads per week, possible well servicing, and routine maintenance.

Site-specific actions were agreed upon during the on-site visit of September 18, 2003 and are included in the proposed action. Standard Conditions of Approval (COAs) are listed in Appendix A of the Egan Resource Management Plan; Oil and Gas Leasing Amendment and Record of Decision and are included as Attachment 2 of this EA.

The maximum disturbance estimated for the proposed action consists of:

Upgrade Access Roads	4750 ft x 16 ft running	1.8
Construct new road	269 ft x 16 ft running	0.1
<u>Well pad</u>	350 ft x 350 ft	<u>2.8</u>
Total		4.7 acres

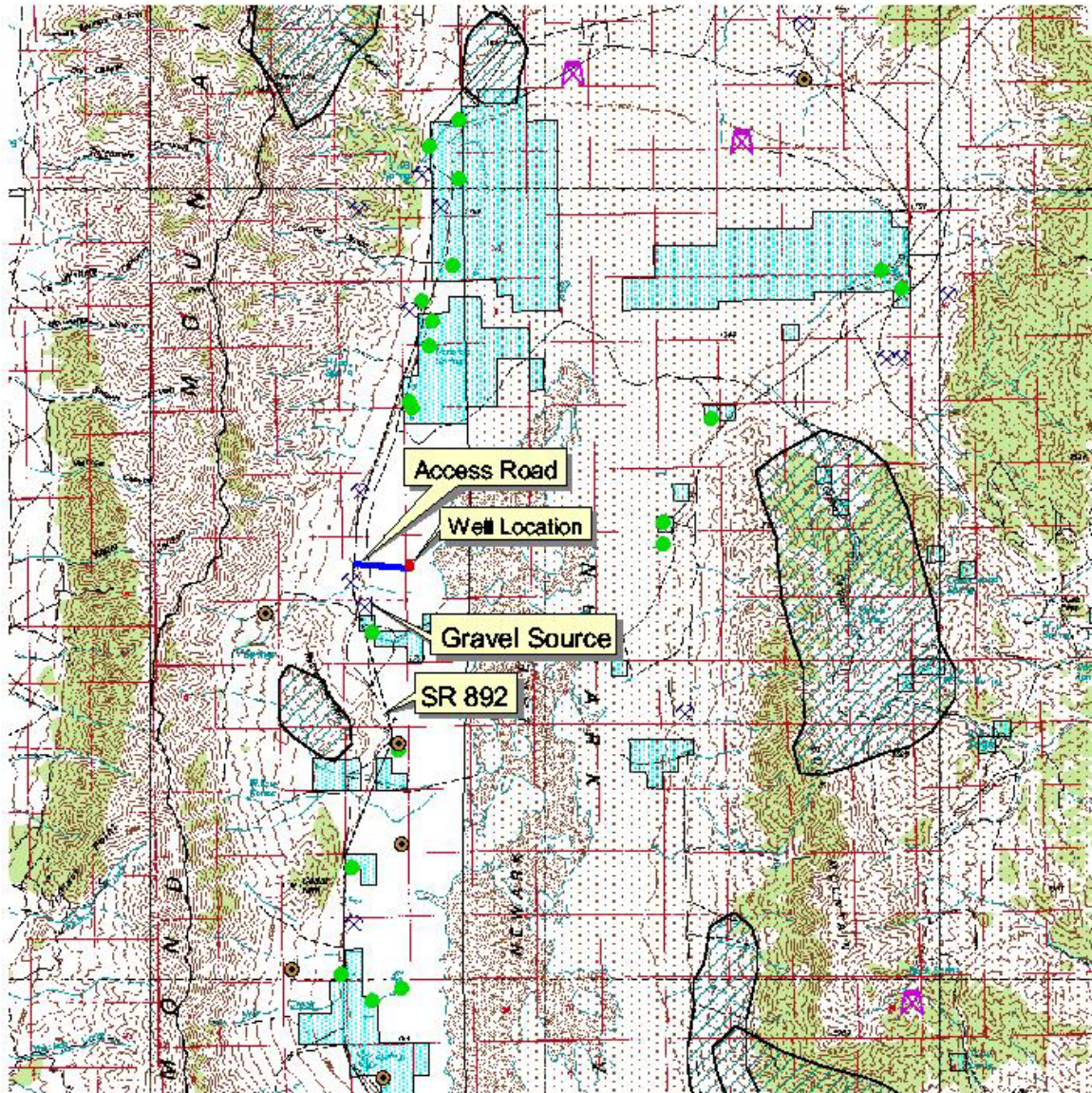
Newark 1:100,000
T22N R55E Sec26

Figure 2

Ely District



Noble Energy EA for APD Rattlesnake Fed. 12-26 Newark Valley, White Pine County, Nevada



- Existing Oil Well
- Gravel pit
- Raptor nest
- Sage Grouse Lek
- T&E Species
- Horse Management Area
- BLM
- Private

2 0 2 4 Miles



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data.

wrw 10-16-03
N 76790
EA NV-404-03-037

Existing Roads and Access

The well site can be reached from Ely, Nevada, by proceeding west on US Highway 50 for approximately 60 miles to the junction with SR 892 (Figure 1). Turn right (north) and proceed for 27.2 miles to an existing 2-track seismic line. Turn right (east) and proceed approximately 0.9 miles, then bear northeast for 296 feet to the drill pad site. Both the seismic line road and the 296 feet of cross country route would be bladed for a 16-foot running width and graveled to a depth of 6". These roads would be maintained in the same or better condition as existed prior to the commencement of operations, and maintenance would continue until final abandonment and reclamation was completed. Rattlesnake Federal 12-26 would be constructed on gently sloping terrain. All available topsoil, approximately the top 6 to 12 inches, would be stripped from the locations and stockpiled for future reclamation. The pad would be leveled, using material excavated from the reserve pit plus cuts and fills from the pad area itself, and then graveled to a depth of 6 ".

The dirt contractor would be provided with an approved copy of the surface use plan and stipulations for weed mitigation and prevention.

No permanent living facilities would be planned for the sites, but there would be approximately three trailers on location during drilling operations, which would serve as temporary offices and housing for the mud logger, geologist, and tool pusher.

The reserve pit would be designed to exclude surface runoff and would be constructed entirely in cut material. The reserve pit would not be lined since it would be impervious to the non-toxic bentonitic drilling fluids. It would be fenced on the three exposed sides during operations to prevent wildlife, wild horses, and livestock from falling into the pit. Once drilling operations are completed, the fourth side would be fenced and remain fenced until grading and reseeded are completed. Recommended fencing diagrams are shown in Attachment 3.

Water Source

Water would be obtained from a well drilled on a corner of the drill pad under a waiver from the State of Nevada.

Source of Construction Materials

Gravel would be obtained from an abandoned gravel pit located along the east side of SR 892 about 0.7 miles south of the access road. Material would be obtained through a mineral material sale.

Waste Materials

Drill cuttings and drilling fluids would be contained in the reserve pit. The reserve pit and drilling fluids contained in the pit would be allowed to dry before backfilling. Pit walls would not be breeched so as to drain fluids to the surrounding surface. Any spills of hydrocarbons from equipment on site would be promptly cleaned up and removed from the location.

All wastes that accumulate during the drilling operations would be contained in a trash cage or dumpster. Wastes would be removed periodically from the location and taken to an approved landfill. Burning would not be allowed on the well site. Chemical toilets with holding tanks would be utilized. All sewage would be disposed of in accordance with county and state regulations.

A Sundry Notice and Report on Wells (form 3160-5) would be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.

Location of Existing and/or Proposed Facilities if the Well is Productive

There are no existing facilities of any kind within a one-mile radius of the proposed well. The nearest producing field is the Blackburn Field located in Pine Valley, Eureka County, approximately 35 miles northwest of the proposed well.

If production were established from this well, a Sundry Notice would be submitted prior to commencement of installation operations. Facilities would be placed on the well site pad, as shown in accompanying APD, so that no additional disturbance would be necessary. All long-term structures would be painted in Standard Environmental Colors to blend with the natural surroundings. A dike would be constructed around facilities designed to hold fluids and would hold 150% of the capacity of the largest tank. Any production pits would be fenced to prevent wildlife entry. Production would be expected to last for several years.

Produced hydrocarbons would be placed in test tanks on location during completion work. Produced wastewater would be confined to an unlined pit for a period not to exceed 90 days after initial production. During that 90-day period an application for approval of a permanent disposal method and location (Onshore Order No. 7), along with the required water analysis would be submitted. Any spills of oil, gas, salt water, or other produced fluids would be cleaned up and removed.

Reclamation

Reclamation would begin concurrently with well site construction activities. All available topsoil, approximately the top 6 to 12 inches, would be bladed off of the drill pad area and stockpiled. The stockpiles would be immediately seeded with the interim seed mixture shown in Attachment 4. Should the new access route be graveled, available topsoil would be similarly scraped off, stockpiled in berms along the edges of the road, and seeded with the interim seed mixture.

Well abandonment and plugging would follow the procedures of 43 CFR 3162.3-4. Upon completion of drilling, Noble Energy, Inc. would remove all material not required for production. All open holes would be backfilled and compacted from bottom to top immediately upon completion of drilling operations. The reserve pit would be completely fenced off on all four sides to prevent access by wildlife, wild horses, and livestock. Any oil spills remaining in the reserve pit after drilling operations would be removed prior to allowing pit drying to take place. The Ely Field Office, (775) 289-1800, would be notified 48 hours prior to the

commencement of reclamation operations.

Once the reserve pit is dry, which normally takes one to two years, dirt work would commence. The well pad and any other associated disturbed areas would be re-contoured to the approximate natural contours. Cuts and fills would be reduced to 3:1 slopes or less. Compacted soils within the disturbed areas would be broken up into a fine-grained seedbed by disking or any other generally accepted method of preparation. The stockpiled topsoil would be evenly distributed to a minimum depth of six inches over the reclaimed areas. Seed from the recommended seed mix (Attachment 5) would be planted on contour with a drill seeder or broadcast technique during the recommended seeding period of October 1 to March 15. A reclamation fence (Attachment 3) would be constructed around the entire drill pad and would remain until revegetation was determined to be successful. The target for successful reclamation would be 20% canopy cover of perennial vegetation as has been determined from existing soil and vegetative surveys in the general area. Should this standard not be met following the initial seeding, the BLM and the operator would meet to decide on the best course of actions necessary to meet the reclamation goals.

The 4,700-foot access route would be ripped, scarified, re-covered with any stockpiled topsoil, and seeded with the same seed mixture recommended for the well pad. Any additional vegetative material that had been brushed off of the route would be spread back over the route to provide protection and moisture retention for the new vegetation. Road reclamation would be done concurrently with the well site reclamation and follow the same procedures.

Should the well go into production, the reserve pit would be reclaimed according to the above schedule, but the well pad and access road reclamation would be deferred until production is completed and the well is plugged and abandoned. If the water well is successful and permitted for continued use, sufficient width of the access road would be left to allow access to the water well.

Noble Energy, Inc. has posted a nationwide bond, as required under 43 CFR 3104.

Noxious Weed Prevention

Noble Energy, Inc. would implement the BLM's policy on the prevention and control of noxious weeds. Prior to entering the site, all construction, drilling equipment, and vehicles would be washed and cleaned to prevent the importation of noxious weed seeds from prior places of work. Vehicles would stay on roads and avoid driving through any weed patches. All seeds used in reclamation would be certified weed-free. Noble Energy, Inc. would monitor for and control noxious weeds during the life of the project, until reclamation is complete, and the reclamation fence is removed.

Monitoring

Monitoring needed to assess reclamation success and continuing environmental stewardship would consist of periodic compliance inspections of the area during the life of the drilling operation by an authorized officer of the BLM. This monitoring would consist of checks on

initial location of facilities, conformance to the APD and Conditions of Approval, and the status of any reclamation. Post-drilling compliance inspections would document, among other things, conformance with the proposed action, completion of earthworks of the reclamation plan, and monitoring for noxious weeds and vegetative success.

The No Action Alternative

The no alternative action is being analyzed in this EA in order to provide a baseline for comparison.

Other Alternatives Considered but not Analyzed in Detail

Other alternatives were considered but not analyzed in detail. The alternative of obtaining drilling make-up water from local existing sources was examined, but there are none in the vicinity of the project area.

A gravel source was tested along the proposed access road to the oil well pad but it was determined that the material was not suitable. The proposed source would be a 100 foot expansion of an old abandoned pit that has suitable existing access to the project area.

The option of not erecting a final reclamation fence around the entire pad location after seeding was considered. Due to present grazing activity, it was felt that a new seeding would attract disproportional grazing pressure on the reclaimed area and decrease the chance of success of the revegetation. In the event that the grazing pressure is decreased, then the fence may not be necessary.

Other Alternatives

No other alternatives are necessary to respond to unresolved issues concerning alternative uses of available resources.

III. DESCRIPTION OF THE AFFECTED ENVIRONMENT WITH THE ASSOCIATED ENVIRONMENTAL CONSEQUENCES

Resources Not Present or Affected by the Proposed Action

There would be no impacts to floodplains, wetlands and riparian areas; Special Status Species (Federally Listed, Threatened Or Endangered Species, Species Proposed For Federal Listing, State Protected Or Otherwise Sensitive Species); wilderness values; areas of critical environmental concern; wild and scenic rivers; prime or unique farmlands; cultural, paleontological and historical resource values; wild horses and burros; Native American religious concerns; or environmental justice.

Ely BLM archeologists conducted a class III cultural survey over the proposed drill pad and cross country route on September 18, 2003. The 0.9 mile access route was surveyed by a BLM

approved contractor in conjunction with a previously permitted geophysical exploration project. The survey found no cultural, paleontological or historical resource values; therefore the proposed action would have “no effect” on cultural, paleontological and historical resources.

Socio-Economic

Affected Environment

Eastern White Pine County is sparsely populated. With the recent decline in metal mining, employment has shifted to government services, tourism, and agriculture.

Environmental Consequences

Proposed Action

The proposed action would provide the local community with short-term employment opportunities over the duration of the drilling operation. Should the well be productive, a private corporation would make an economic use of the public lands and long-term employment opportunities would be available for a larger work force.

No Action Alternative

The local community would be deprived of this short term and potential future employment opportunity. This economic use of the public lands would not occur.

Soils and Vegetation

Affected Environment

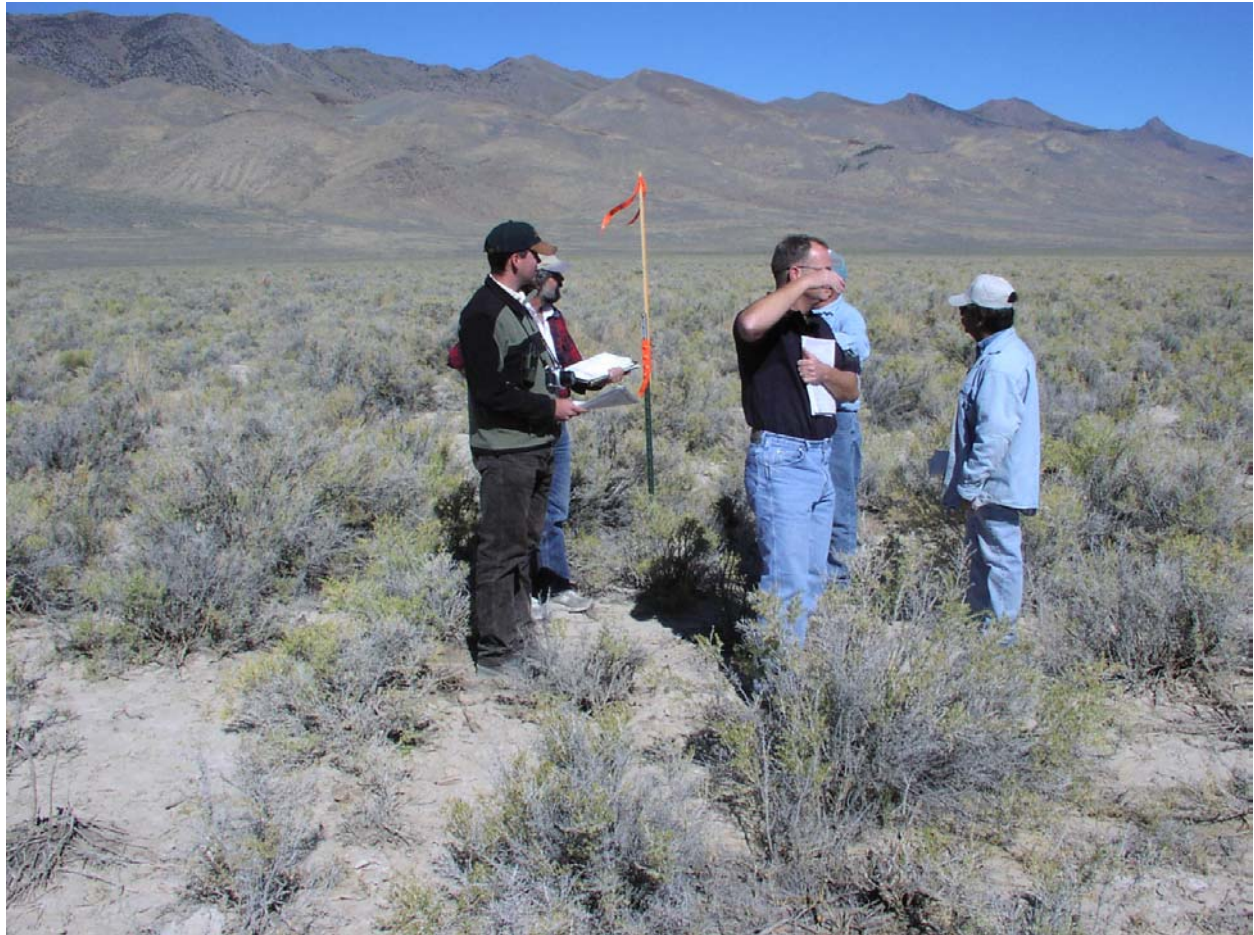
Figure 3 shows the flat topography and sparse vegetation of the project site. The project area is in the dry lake bed of the Newark Valley playa. The surface consists of windblown silt. Native vegetation is a salt desert shrub plant association consisting of greasewood, bud sagebrush, small rabbitbrush, shadscale, ephedra, winterfat, horsebrush, Indian ricegrass, and bottlebrush squirreltail.

Environmental Consequences

Proposed Action

It would be difficult to reestablish native vegetation in the disturbed area because of the low amount of precipitation and high alkalinity. Although reclamation involves reseeding, seedings in these alkaline environments often meet with limited success. Given time, the salt desert shrubs should re-establish, but the long term impacts to vegetation may be evident for at least 10 to 20 years. Should the well be placed into production, this acreage would be unavailable for several additional years.

Figure 3. Photograph of the proposed Alpine, Inc. oil and gas well site, from the northwest corner looking southeast.



No Action Alternative

Under the no action alternative, impacts as described above would not occur.

Invasive, Non Native Species (Including Noxious Weeds)

Affected Environment

Noxious weeds, those specifically listed by the State of Nevada, are shown in Attachment 6. A noxious weed risk assessment was completed for this project. See Attachment 7. The overall risk was calculated as moderate based on BLM Manual 9015. No noxious weeds were found on site during pre-site inspections of September 18 and October 8, 2003. However Perennial Pepperweed, Musk Thistle, and Russian Knapweed have been inventoried elsewhere along SR892 in this portion of Newark Valley. Very little cheat grass, halogeten, mustard, or Russian

thistle were observed during the site visits.

Environmental Consequences

Proposed Action

There are two categories of weeds as defined by the BLM. One is invasive, non native weeds. The other is Noxious Weeds. Noxious weeds are defined on a State weed list as those species that are undesirable, introduced species for which aggressive control methods may stop their establishment in a given area. A zero tolerance policy for these weeds is in effect for project disturbances such as this oil well. This class of weeds, (the Noxious Weed) is the class of weed that was not found on site during the Jan. 13, and Feb 5 site visits. The invasive non native weeds are introduced species such as halogeton, tumbleweed, certain mustards, and other species that are so prevalent and opportunistic within the region that it is no longer practical or possible to expect a zero tolerance policy for these species. Newly disturbed areas almost always will have some of these introduced weed species show up with the initial seeding because these weed seeds are already on site in the soil or nearby. Seed mixes are designed to be competitive with these species, and usually, over time, the longer lived perennial natives will out compete the opportunistic annual weeds. The goal of the reclamation objectives is to match the perennial cover of the reclaimed area with that of the undisturbed area.

The well site and access areas would be exposed to potential invasive and Noxious Weeds as a result of development and production activities. The susceptibility to weeds would remain throughout the life of the project including the reclamation period. Once the vegetative cover at the site has been restored, the risk of weed establishment would diminish to approximately pre-development levels. Cleansing equipment and using weed free seed would mitigate these risks. The prevention, monitoring, and eradication measures incorporated in the proposed action are adequate to mitigate any potential Noxious Weed invasion.

No Action Alternative

Under the no action alternative, impacts as described above would not occur.

Visual Resources Management (VRM)

Affected Environment

The proposed project is located within an extremely remote, uninhabited, portion of White Pine County classified as Visual Resource Management (VRM) Class IV zone. The objective for the class IV zone is to allow change, even dominant change, but to mitigate the change as well as possible.

Environmental Consequences

Proposed Action

The drilling operation would be directly visible from within one mile of SR892. Should the well be put into production, production facilities and activities would be highly visible for the life of the well. Reclamation and reseeding would reduce long term impacts, although re-growth of the vegetation is expected to be slow. The contrasting visual effects of vegetation removal and reclamation would be noticeable for as much as 50 years, as seen in the trace of old seismic lines, until such time that the climax vegetation was sufficiently re-established to blend in with the surrounding undisturbed areas.

No Action Alternative

Under the no action alternative, impacts as described above would not occur.

Wild Horses and Burros

Affected Environment

The project area is not within a Horse Management Area (HMA). Therefore they are not affected.

Wildlife

Affected Environment

The area of the proposed drilling project is yearlong pronghorn habitat but contains no key/critical habitats for this species. There are no sage grouse leks or seasonal use areas. Operations commencing during the period of May 1 to July 15 would be subject to the Ely District policy management actions for the conservation of migratory birds. There is no other known wildlife or wildlife habitat in the project area for which timing limitations would be appropriate for the proposed action.

Environmental Consequences

Proposed Action

Wildlife activity would be disrupted by noise, vehicular traffic, drilling operations, and the loss of as much as 4.7 acres of vegetation during the one or more months of drilling and earthworks. Drilling water and other fluids would be fenced or otherwise contained to prevent access by wildlife. Should the well be productive, periodic disruptions and the loss of vegetation would probably last for several years. Once the well is plugged and abandoned, whether immediately or after production, disruptions would cease and reclamation would eventually restore vegetation to its pre-project status.

No Action Alternative

Under the no action alternative, impacts as described above would not occur.

Livestock Grazing

Affected Environment

The proposed well site is located within the Strawberry Grazing Allotment. This use area is grazed seasonally by cattle. Cattle were observed on the private land south of the project area during the site visit of September 18, 2003.

Environmental Consequences

Proposed Action

There would be an immediate loss of 4.7 acres of vegetation within the project area during as many as three years of drilling and reclamation activities. It is estimated that approximately one AUM of forage would be lost during this time. Should the well be placed in production, the loss of acreage would last for several years. Over time, the native salt desert shrubs should be re-established. There are no anticipated conflicts between rangeland resources and the proposed action.

No Action Alternative

Under the no action alternative, impacts as described above would not occur.

Water Quality (Drinking/Ground)

Affected Environment

There are no known springs or surface water within 1 mile of the proposed well. An unnamed spring is located on private land approximately 1.2 miles southwest of the proposed well location.

Environmental Consequences

Proposed Action

The proposed action would not affect any existing drinking water sources within the region of the proposed action. There would be a local, short-term drawdown of water in the immediate vicinity of the proposed water well on the Rattlesnake Fed. 12-26 drill site pad.

The reserve pit would be impervious, as described in the proposed action, so the fluids would not be able to intermix with and possibly degrade near-surface groundwater. Federal and State water regulations prevent downhole contamination of groundwater in proposed oil well.

No Action Alternative

Under the no action alternative, no impacts would occur.

Wastes, Hazardous and Solid

Affected Environment

The caustic drilling agents, lime (CaO) and soda ash (Na₂O), would be added to the drilling fluid in small amounts in order to control the pH of the fluid. The drilling fluid, itself, consists of mostly water, bentonite, barite, and the diluted additives. It is not toxic, either as a fluid or when dried, mixed with drill cuttings, in the reserve pit. (Drilling fluids are discussed in the Egan Resource Management Plan; Proposed Oil and Gas Leasing Amendment and Final Supplemental Environmental Impact Statement on p. A-5.) This fluid would be contained within the reserve pit and, upon completion of drilling, allowed to dry, then covered with stockpiled fill and topsoil, and seeded. Unused additives would be hauled off site during rig demobilization. Petroleum products are also used. Hydrocarbon spills would be cleaned-up according to protocols regulated by the Nevada Division of Environmental Protection (NRS 445A)

No other hazardous wastes would be generated. Solid wastes would be disposed of properly in accordance with the standard Conditions of Approval.

Environmental Consequences

Proposed Action

The precautions and mitigating measures in the proposed action are adequate to prevent impacts from wastes, hazardous and solid.

No Action Alternative

Under the no action alternative, impacts as described above would not occur.

Air Quality

Affected Environment

Periodic degradation of air quality occurs due to winds blowing dust from nearby areas and occasional regional air pollution.

Environmental Consequences

Proposed Action

There would be a localized increase of dust levels as a result of the drilling operation and road work. The dust generation would be associated mainly with construction activities and vehicle use. Wind blown dust from these exposed areas could cause a temporary degradation in air

quality. Nevada State Air Quality standards would apply to this operation, and the operator would be required to apply water for dust abatement if the problem was above a threshold level as stated in the standards. Following reclamation of the site and successful revegetation, the local air quality would return to pre-operation conditions. Should the well be placed in production, dust would be generated by periodic vehicle traffic for several years.

No Action Alternative

Under the no action alternative, impacts as described above would not occur.

IV. CUMULATIVE IMPACTS

Cumulative impacts are discussed in the Egan Resource Management Plan (RMP) Proposed Oil and Gas Leasing Amendment and Final Environmental Impact Statement, August 1993, pp. 4-31 through 4-43. Typical oil and gas activities, including exploration, wildcat drilling, production and field development, and abandonment, are described in Appendix A. No additional analysis is necessary to address cumulative impacts of the proposed action.

Resources that were identified as potentially being affected in a cumulative sense consist of wildlife habitat, woodland products, cultural resources, recreational and visual resources, livestock and vegetation, wild horses and burros, soils and air quality. The reasonable development scenario for the Egan Resource Area assumed that 175 wells would be drilled during the life of the plan and that only 10% of these would be producers. Approximately 24 wells have been drilled in the area analyzed in the Egan RMP since 1993. None have been producers.

V. PROPOSED MITIGATING MEASURES

The preventative measures and procedures of the proposed action and the attached Conditions of Approval (Attachment 2) are adequate to mitigate adverse effects to the human environment. No additional mitigating measures are proposed as a result of the impact analysis.

VI. SUGGESTED MONITORING

The monitoring measures included in the proposed action are sufficient to ensure mitigation of the potential impacts described above. No additional monitoring measures are proposed as a result of the impact analysis.

VII. CONSULTATION AND COORDINATION

Intensity of Public Interest and Record of Contacts

There is general public interest in this type of potential development. The proposed action was discussed with representatives of the Duckwater Shoshone Tribal representatives on August 27, 2003. The Application for Permit to Drill (APD) was posted at the Nevada BLM State Office on or shortly after September 21, 2003. Notification of the availability of this APD was posted on the Ely Field Office website (http://www.nv.blm.gov/ely/nepa/ea_list.htm) on October 1, 2003. Letters requesting comments for inclusion in the EA were mailed to the Committee for the High Desert and the Nevada Division of Wildlife on October 2, 2003. No comments have been received.

Record of Internal District Review

Karen Prentice	Invasive, Non-Native Species; Riparian/Wetlands
Ryan Pitts	Range
Nathan Thomas	Cultural Resources
Steve Leslie	Visual Resource/Wilderness
Water Quality	Jeff Brower
Lynn Bjorklund	Reclamation
Mike Perkins	Wildlife, Migratory Birds, Special Status Plants, Special Status Animals
Elvis Wall	Native American Consultation
Jake Rajala	Environmental Coordinator

Attachment 1. Application for Permit to Drill

The APD is available for review from the Ely Field Office of the BLM at:

HC33 Box 33500
Ely, Nevada 89301

Or by e-mail from William_Wilson@nv.blm.gov

Attachment 2. Conditions of Approval (COAs)

Application for Permit to Drill (APD) and Sundry Notices

The regulations governing drilling operations on public lands are stated in 43 CFR 3260. With submittal of an APD or Sundry Notice by the operator or lessee, the following conditions of approval will be required for the operation as applicable.

Pre-Construction

1. Existing roads should be used to the extent possible. Additional roads, if needed, shall be kept to an absolute minimum and the location of routes must be approved by the AO prior to construction.
2. Upon determination of an impending field development, a transportation plan will be requested to reduce unnecessary access roads.
3. All access roads will be constructed and maintained to BLM road standards (BLM Manual Section 9113).
4. Off-road travel will be restricted to terrain with less than 30 percent slopes unless approved by the AO.
5. Proposed surface disturbance and vehicular travel will be limited to the approved well location and access route.
6. Any changes in well location, facility location, access, or site expansion must be approved by the AO in advance.
7. Prior to approval of an APD or other lease operations, a Section 106 consultation must be completed by the AO as provided for under the Nevada BLM Programmatic Agreement for Cultural Resources.
8. Any activity planned within a ¼-mile on either side the Pony Express National Historic Trail must undergo a visual assessment. Appropriate mitigation of visual impacts will be implemented as necessary to keep the management corridor in as natural a condition as possible.

Well Pad and Facility Construction

1. Every pad, access road, or facility site must have an approved surface drainage plan.
2. A site diagram depicting the location of production facilities, recontoured slopes and stabilization measures shall be approved by the AO prior to installation of production facilities.

3. Drainage from disturbed areas will be confined or directed so that erosion of undisturbed areas is not increased. In addition, no runoff water (including that from roads) will be allowed to flow into intermittent or perennial waterways without first passing through a sediment-trapping mechanism. Erosion control structures may include: water bars, berms, drainage ditches, sediment ponds, or devices.
4. Access road construction for exploratory wells should be planned such that a permanent road can later be constructed in the event of field development.
5. Construction of access roads on steep hillsides and near watercourses will be avoided where alternate routes provide adequate access.
6. Access roads requiring construction with cut and fill will be designed to minimize surface disturbance and take into account the character of the landform, natural contours, cut material, depth of cut, where the fill material will be deposited, resource concerns, and visual contrast.
7. Fill material will not be cast over hilltops or into drainages. Cut slopes should normally be no steeper than 3:1 and fill slopes no steeper than 2:1.
8. Low water crossings should be used whenever possible. Installation of culverts, if necessary, will be designed to maintain the original stream gradient and will be of adequate size to accommodate a 24-hour 100-year event. Fill material will be properly compacted in layers not exceeding 6 inches in thickness to insure stability and to prevent washing out or dislocation of the culvert. The road surface should not be less than 12 inches above the culvert to prevent crushing from weight loads.
9. As required, fill slopes surrounding culverts will be riprapped with a well-graded mixture of rock sizes containing no material greater than two feet or smaller than three inches. The ratio of maximum to minimum dimension of any rock shall not exceed 6:1.
10. Water turnouts needed to provide additional drainage will be constructed not to exceed two percent slope to minimize soil erosion.
11. Well site layout should take into account the character of the topography and landform. Deep vertical cuts and steep long fill slopes should be avoided. All cut and fill slopes should be constructed to the least percent slope practical.
12. Trash will be retained in portable trash cages and hauled to an authorized disposal site for disposal. Burning will not be allowed on the well site.
13. No drilling or storage facilities will be allowed within 500 feet of any pond, reservoir, canal, spring, or stream. Other protective areas near water may be required to protect riparian habitat and special status species.
14. Spring and water developments on public lands may be used only with the prior written

approval of the AO or the water rights holder.

15. To maintain aesthetic values, all semi-permanent and permanent facilities will be painted to blend with the natural surroundings. The Standard Environmental Colors will be used for color selection. Fences shall be made of non-reflective materials.
16. Fences shall not be cut without prior approval of the AO. Before cutting any fences, the operator shall firmly brace the fence on both sides of the cut; a temporary gate will be installed for use during the course of operations unless the fence is immediately repaired. Upon completion of operations, fences shall be restored to at least their original condition.
17. As directed by the AO, cattle guards will be installed whenever access roads are through pasture gates or fences. These cattle guards shall be maintained. This includes cleaning out under cattle guard bases when needed.
18. The depth of surface soil material to be removed and stockpiled will be specified by the AO. If topsoil is stockpiled for more than one year, the stockpile shall be seeded or otherwise protected from wind and water erosion. The stockpile shall be marked or segregated to avoid loss or mixing with other subsurface materials. Any trees removed will be separated from soils and stockpiled separately.
19. Mud, separation pits, and other containments used during the exploration or operation of the lease for the storage of any hazardous materials shall be adequately fenced, posted, and/or covered.
20. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the AO. Within five working days the AO will inform the operator as to whether:
 - a. the materials appear eligible for the National Register of Historic Places
 - b. the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
 - c. a timeframe for the authorized officer to complete an expedited review under 36 CFR 800.11 or other applicable Programmatic Agreement, to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate
21. If the operator wishes, at any time, relocate activities to avoid the expense of mitigation and/or the delays associated with the process described in item 20 above for inadvertent discovery of cultural resources, the authorized officer will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The authorized officer will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the authorized officer that the required mitigation has been completed, the operator will then be

allowed to resume construction.

22. Bald eagle roosts, peregrine falcon hawk sites and known occupied raptor aeries (nests) will be avoided during the nesting and fledging period.
23. Field development construction activities within ½-mile of a sage grouse lek will require motorized equipment to have noise abatement devices to preclude excessive noise during the sage grouse strutting period.
24. The cutting of rare, unique or unusual trees will not be permitted. In particular cutting of Bristlecone pine, Swamp Cedar, Ponderosa pine, and White Fir will be avoided.
25. Consultation with the U.S. Fish and Wildlife Service (FWS) is required per section 7 of the Endangered Species Act prior to approval of an APD or other lease operations if any proposed listed or listed threatened or endangered species or its critical habitat is likely to be affected by project activities. If there is deemed to be any adverse impact, the proposal will be modified or the request denied.
26. Actions that will adversely impact a special status species will be modified.
27. Fences shall be flagged with bright colored flagging at least every rod for visibility to wild horses. All fences should be constructed using green steel posts with white or silver tops to increase visibility. Fences should also avoid obvious horse migration routes (deep trails, stud piles) if at all possible.
28. No access roads, drill pads, mud pits or storage facilities will be allowed within 200 meters of cave entrances, drainage areas and subsurface passages. No waste material or chemicals will be placed, or disposed of, in sinkholes or gates during specified time frames by cave entrances. If during construction activities any sinkholes or cave openings are discovered, construction activities will cease and the AO will be notified.
29. The discharge of dredged or fill material into surface waters such as navigable and interstate waters and their tributaries, wetlands adjacent to those waters and all impoundments of those waters may require an individual permit or notification under Section 404 of the Clean Water Act (CWA) issued by the District Engineer (DE) of the Corps of Engineers (COE). Criteria applied under Section 404 is established in regulation and will be used to determine the type of permit or notification required.

Field Operation

1. Operations shall be done in a manner that prevents damage, interference, or disruption of water flows, and improvements associated with all springs, wells, or impoundments. It is the operator's responsibility to enact the precautions necessary to prevent damage, interference, or disruptions.
2. Companies controlling roads that provide access into crucial wildlife areas may be required

to close the road with a lockable gate to prevent general use of the road during critical periods of the year when resource problems are experienced (during hunting seasons, winter, etc.). This restrictive measure will be applied where needed to protect wildlife resources or to minimize environmental degradation.

3. The use of closed road segments will be restricted to legitimate, authorized agents of the lessee and/or their subcontractor(s), the land managing agency, and other agencies with a legitimate need (NDOW, other law enforcement agencies, etc.).
4. Unauthorized use or failure to lock gates during specified time frames by the lessee or its subcontractors will be considered a violation of the terms of the APD or associated grants.
5. The operator shall regularly maintain all roads used for access to the lease operation. A maintenance plan may be required. A regular maintenance program may include, but not be limited to, upgrading of existing roads, blading, ditching, culvert and drainage installation, and graveling or capping of roadbed.
6. Noxious weeds that may be introduced due to soil disturbance and reclamation will be treated by methods to be approved by the AO. These methods may include biological, mechanical, or chemical. Should chemical methods be approved, the lessee must submit a Pesticide Use Proposal to the AO 60 days prior to the planned application date.

Reclamation and Abandonment

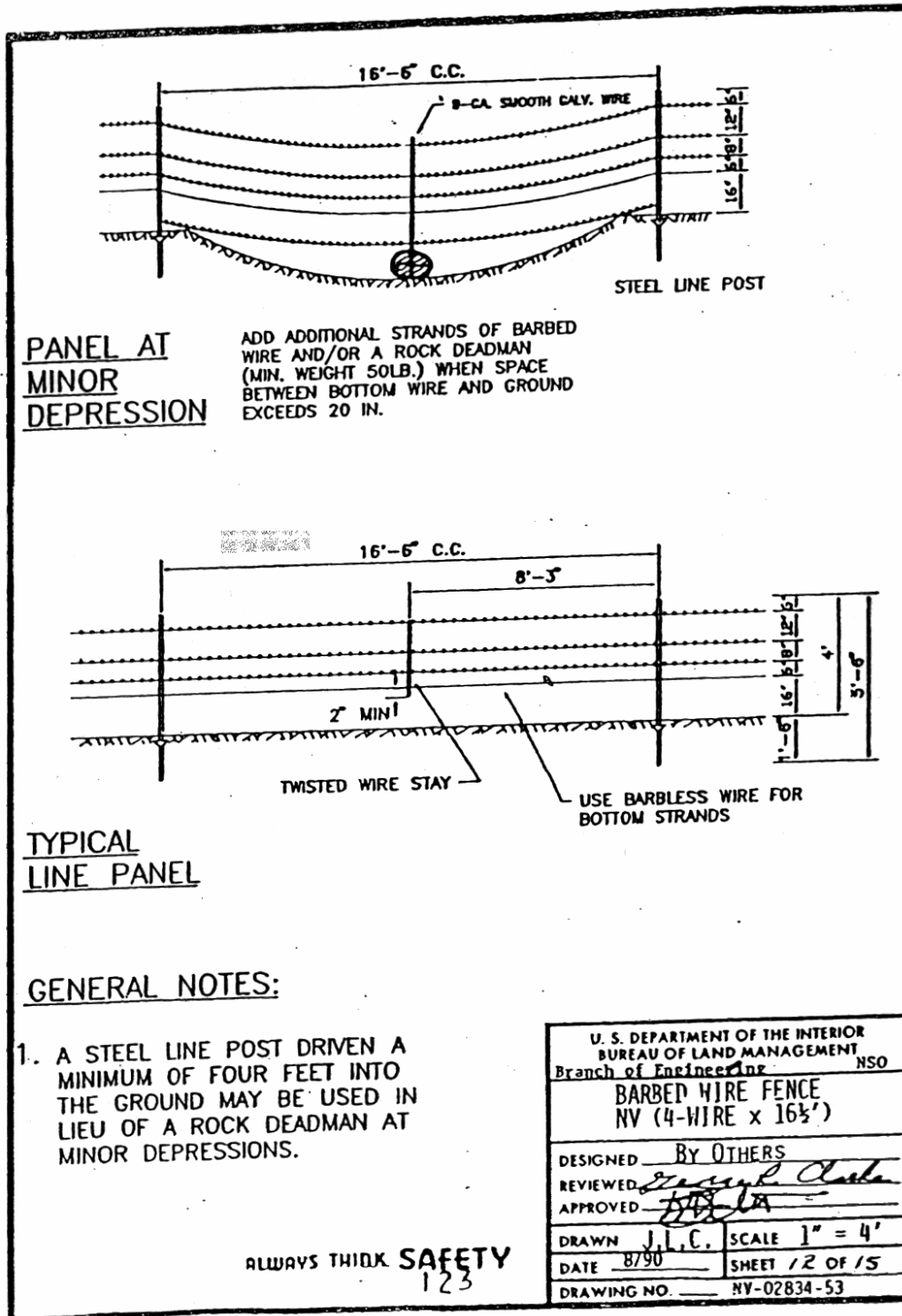
2. A water well may be accepted by the Ely District upon completion of operations. Please submit the following information to the Ely District Office, Bureau of Land Management, HC 33, Box 33500, Ely, NV 89301-9408:
 - a. Water Analysis
 - b. Type of inside diameter of casing used in well
 - c. Total depth of well
 - d. Depth of concrete seal
 - e. Depth of static water level
 - f. Water bearing formation or description of aquifer
3. The operator or contractor will contact the AO 48 hours prior to reclamation work.
4. Restoration work may not begin on the well site until the reserve pits are completely dry.
5. Disturbed areas will be recontoured to blend as nearly as possible with the natural topography prior to revegetation. This includes removing all berms and refilling all cuts.

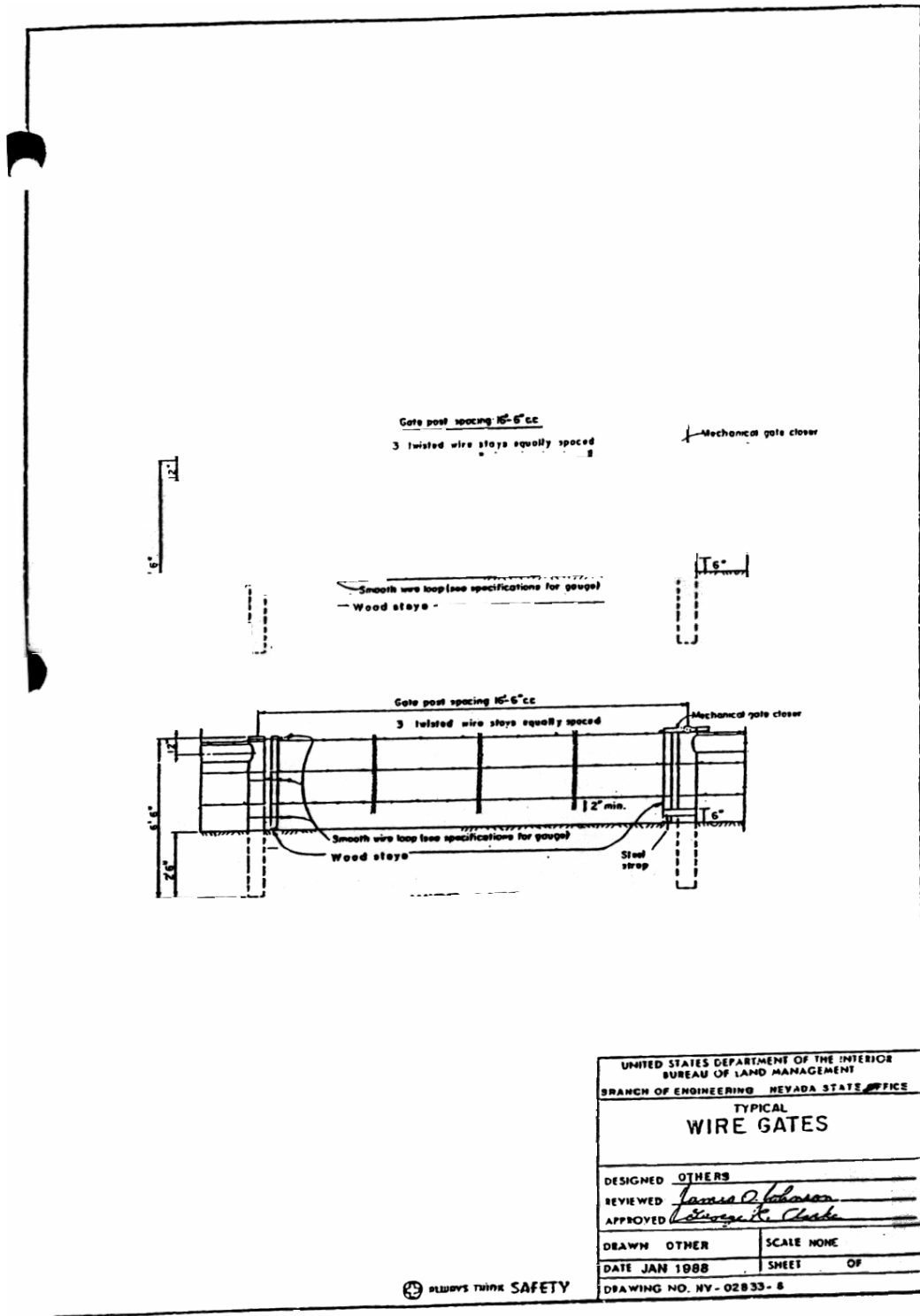
Compacted portions of the pad will be ripped to a depth of 12 inches unless in solid rock.

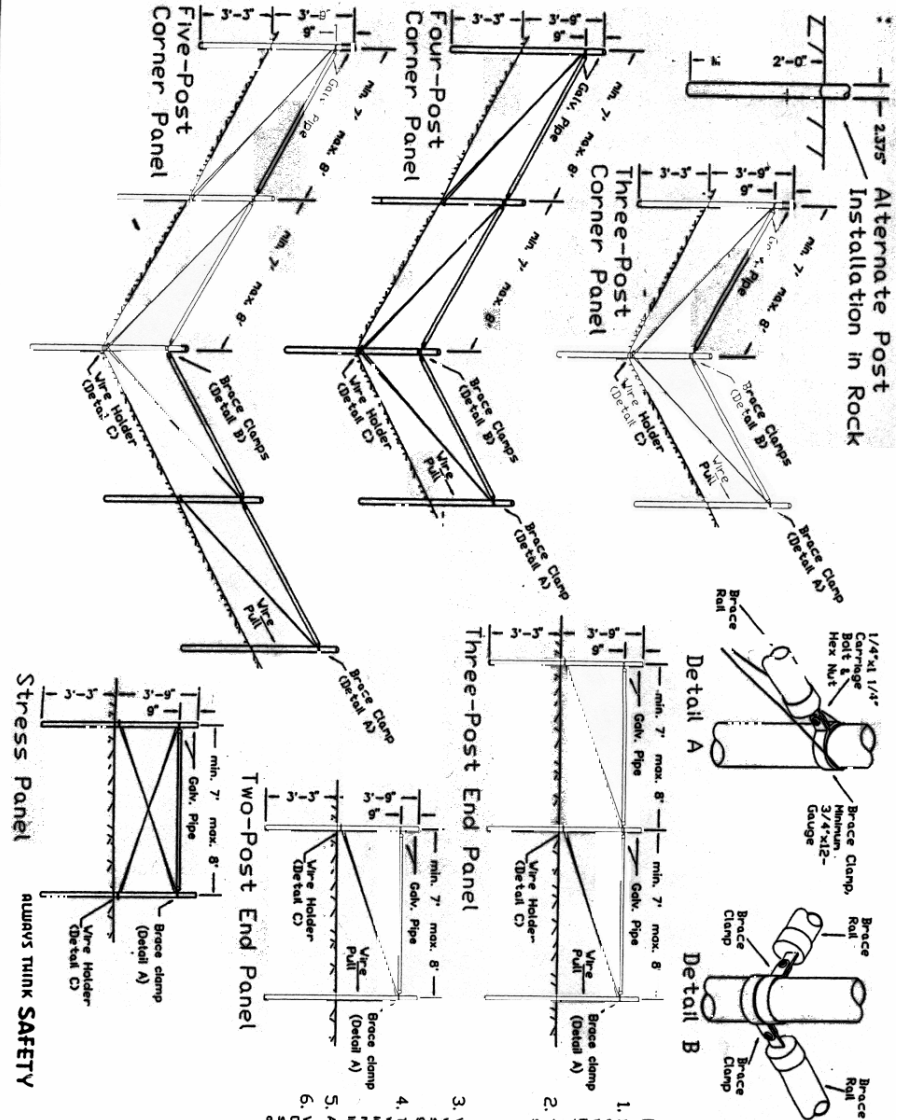
6. Site preparation for reclamation may include contour furrowing, terracing, reduction of steep cut and fill slopes, and the installation of water bars, etc.
7. All portions of the access roads not needed for other uses as determined by the AO will be reclaimed.
8. The stockpiled topsoil will be spread evenly over the disturbed area.
9. The operator will be required to construct water bars and re-open drainages on abandoned access roads and pipeline routes to minimize erosion as required. Water bars will be spaced appropriately dependent upon topography and slope. Pipeline routes shall be water-barred perpendicular to the fall-line of the slope.
10. The area is considered to be satisfactorily reclaimed when all disturbed areas have been recontoured to blend with the natural topography, erosion stabilized and an acceptable vegetative cover has been established. The Nevada Guidelines for Successful Revegetation for the Nevada Division of Environmental Protection, the Bureau of Land Management and the U.S.D.A Forest Service (attached as part of the SPPs/COAs) will be used to determine if revegetation is successful.
11. Rehabilitation shall be planned on the sites of both producing and abandoned wells. The entire site or portion thereof, not required for the continued operation of the well, should be restored as nearly as practical to its original condition. Final grading of back-filled and cut slopes will be done to prevent erosion and encourage establishment of vegetation.
12. Petroleum products such as gasoline, diesel fuel, helicopter fuel, crankcase oil, lubricants, and cleaning solvents used to fuel, lubricate, and clean vehicles and equipment will be containerized in approved containers.
13. Hazardous material shall be properly stored in separate containers to prevent mixing, drainage, or accidents. Hazardous materials shall not be drained onto the ground or into streams or drainage areas.
14. Totally enclosed containment shall be provided for all solid construction waste including trash, garbage, petroleum products, and related litter will be removed to an authorized sanitary landfill approved for the disposal of these classes of waste.
15. All construction, operation, and maintenance activities shall comply with all applicable Federal, State, and local laws and regulations regarding the use of hazardous substances and the protection of air and water quality.
16. In construction areas where recontouring is not required, vegetation will be left in place wherever possible and the original contour will be maintained to avoid excessive root damage and allow for resprouting.

17. Watering facilities (e.g. – tanks, developed springs, water lines, wells, etc.) will be repaired or replaced if they are damaged or destroyed by construction activities to its predisturbed condition as required by the AO.
18. Mulching of the seed-bed following seeding may be required under certain conditions (i.e. – expected severe erosion), as determined by the AO.
19. Seed will be broadcast between October 1 and March 15 using a site-specific seed mixture and depth of planting as determined by the AO. Seed may be applied with a rangeland drill at half the rate of broadcast seeding. All seeding application rates will be in pounds of pure live seed per acre. Seed should be adapted varieties.

Attachment 3. Fencing Diagrams







General Notes:

1. Brace wire shall be wrapped two times around each post. The brace wires will then be twisted tight.
2. The Posts and Braces shall be as specified and of the following sizes:
Post Pipe: 2" Schedule 40 (2.375" O.D., 3.65 lbs./ft.)
Brace Pipe: 1/4" Schedule 40 (1.660" O.D., 2.27 lbs./ft.)
3. Wire spacing shall be as specified in the drawings and gate specifications. Wires shall be twisted tight.
4. The Contracting Officer will determine where to use the Alternate Post installation in Rock. An undersized hole must be drilled in the rock for this installation.
5. All fittings and tie wire shall be galvanized.
6. With the approval of the Contracting Officer, other methods may be substituted for the clamp for holding down the brace wire.

STEEL PIPE PANELS

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
BRANCH OF ENGINEERING, NEVADA STATE OFFICE

DESIGNED BY OTHERS
REVIEWED BY *[Signature]*
APPROVED BY *[Signature]*
DRAWN J.L.C. SCALE 1" = 4'
DATE 8/21/90 SHEET OF
DRAWING NO. NV-02834(61)

Attachment 4

Interim Seed Mix for Salt Desert Shrub Regions

*

<u>Species</u>	<u>Seeds/Lb</u>	<u>Seed rate</u> lbs/ac	<u>Seeds/sq ft</u>
Agropyron sibericum (Siberian wheatgrass)	170,000	3.0	11
Elymus cinerus (Magnar Great Basin Wildrye)	95,000	5.0	11
Oryzopsis hymenoides (Indian ricegrass)	141,000	4.0	12
Bouteloua gracilis (Blue grama)	825,000	0.5	9
Secale cereale (Cereal rye)	18,000	10	4
Triticum aestivum (Wheat)	14,000	10	3
Total		32.5 lbs/ac	50 seeds/sq ft.

Seeds should be planted between October 1 and March 15.

Substitutions can be made depending on seed price and availability. Contact the BLM if substitutions are required.

* Seed rate - Adjust listed pounds/acre for pure live seed.

Pure Live Seed pounds/acre = $\frac{\text{Seed rate (listed above lbs/acre)}}{(\% \text{germination}) (\% \text{purity})}$

Attachment 5 Final Seed Mixture

Recommended Seed Mix for Rattlesnake APD

<u>Species</u>	<u>Seeds/Lb</u>	<u>* Seed rate lbs/ac</u>	<u>Seeds/sq ft</u>	
Distichlis stricta (Inland saltgrass)		520,000	1.0	6
Sporobolus airoides (Alkali sacaton)	1,758,000	0.1	4	
Squirrel tail (Sitanion hystrix)	192,000	2.0	9	
Poa sandbergii (Sandberg's bluegrass)	925,000	0.1	2	
Agropyron cristatum x desertorum (Hycrest Crested Wheatgrass)	225,000	2.0	11	
Elymus cinerus (Magnar Great Basin Wildrye)	95,000	5.5	12	
Indian ricegrass (Oryzopsis hymenoides)	141,000	2.0	6	
Secale cereale (Cereal rye)	18,000	10	4	
Linum lewisii (Appar Blue Flax)	293,000	0.5	3	
Penstemon palmeri (Palmer penstemon)	610,000	0.5	7	
Atriplex confertifolia (Shadscale)	64,900	1.0	1	
Artemisia tridentata wyomingensis (Wyoming Big Sagebrush)	2,500,000	0.1	2 (estimate) (low germination)	

Total

24.8 lbs/ac

67 seeds/sq ft

Seeds should be planted between October 1 and March 15.

Substitutions can be made depending on seed price and availability. Contact the BLM if substitutions are required.

* Seed rate - Adjust listed pounds/acre for pure live seed.

Pure Live Seed pounds/acre = $\frac{\text{Seed rate (listed above lbs/acre)}}{(\% \text{germination}) (\% \text{purity})}$

Attachment 6 Nevada Noxious Weed List

NEVADA NOXIOUS WEED LIST		
Common Name	Latin Name	Other Name(s)
Austrian fieldcress	<i>Rorippa austriaca</i>	Swaisionpea
Austrian peaweed	<i>Sphaerophysa salsula</i>	
Black henbane	<i>Hyoscyamus niger</i>	
Camelthorn	<i>Alhagi pseudalhagi</i>	<i>A. camelorum</i>
Canada thistle	<i>Cirsium arvense</i>	
Carolina Horsenettle	<i>Solanum carolinense</i>	
Common crupina	<i>Crupina vulgaris</i>	
Common St. Johnswort	<i>Hypericum perforatum</i>	Goatweed; Klamath weed
Dalmation toadflax	<i>Linaria genistifolia</i> <i>ssp. dalmatica</i>	
Diffuse knapweed	<i>Centaurea diffusa</i>	
Dyer's woad	<i>Isatis tinctoria</i>	
Hoary cress	<i>Cardaria draba</i>	whitetop
Houndstongue	<i>Cynoglossum officinale</i>	
Iberian starthistle	<i>Centaurea iberica</i>	
Johnsongrass	<i>Sorghum halepense</i>	Perennial sorghum
Leafy spurge	<i>Euphorbia esula</i>	
Mediterranean sage	<i>Salvia aethiopis</i>	
Medusahead	<i>Taeniatherum caput-medusae</i>	Medusahead rye
Musk thistle	<i>Carduus nutans</i>	
Perennial pepperweed	<i>Lepidium latifolium</i>	Tall whitetop
Perennial sowthistle	<i>Sonchus arvensis</i>	
Poison Hemlock	<i>Conium maculatum</i>	

NEVADA NOXIOUS WEED LIST		
Common Name	Latin Name	Other Name(s)
Puncturevine	<i>Tribulus terrestris</i>	
Purple loosestrife	<i>Lythrum salicaria</i>	Purple lythrum
Purple starthistle	<i>Centaurea calcitrapa</i>	
Rush skeletonweed	<i>Chondrilla juncea</i>	
Russian knapweed	<i>Centaurea repens</i>	
Saltcedar	<i>Tamarix ramosissima</i>	Tamarisk
Scotch thistle	<i>Onopordum acanthium</i>	
Silverleaf nightshade	<i>Solanum elaeagnifolium</i>	White horsenettle
Spotted knapweed	<i>Centaurea maculosa</i>	
Squarrose knapweed	<i>Centaurea virgata</i> <i>ssp. squarrosa</i>	
Sulfer cinquefoil	<i>Potentilla recta</i>	
Yellow starthistle	<i>Centaurea solstitialis</i>	
Yellow toadflax	<i>Linaria vulgaris</i>	butter and eggs
Waterhemlock	<i>Cicuta ssp.</i>	
Western waterhemlock	<i>Cicuta douglasii</i>	
Wild licorice	<i>Glycyrrhiza lepidota</i>	American licorice

Attachment 7

RISK ASSESSMENT FOR NOXIOUS WEEDS

On 10-17-03 a Noxious Weed Risk Assessment was completed for Noble Energy, Inc.'s Application for Permit to Drill (APD) located in Newark Valley, White Pine County, Nevada, T10N, R57E, Sec. 24. The project involves approximately 5 acres which were partially surveyed for noxious weed occurrence. The proposed surface disturbance consists of completing approximately 1 mile of access road and a 350foot square drill pad – a total of 4.7 acres. The drilling would probably take place in October and November.

Factor 1 assesses the likelihood of noxious weed species spreading to the project area.

For this project, the factor rates as low (3) at the present time. No noxious weeds were observed in the area during site visits for this project 9-18-03 or 10-8-03. However Perennial Pepperweed, Musk Thistle, and Russian Knapweed have been inventoried elsewhere along SR892 in this portion of Newark Valley.

Factor 2 assesses the consequences of noxious weed establishment in the project area.

For this project, the factor rates as moderate (4). This means that as many as 4.7 acres could be disturbed by this project.

The Risk Rating is obtained by multiplying Factor 1 by Factor 2.

For this project, the Risk Rating is moderate (12). Vehicles and equipment will be washed prior to entering the site. Travel will be restricted to this route. Reclamation, which will commence upon completion of operations, will include re-establishment of topsoil cover and re-seeding. The reclaimed area would be monitored for noxious weeds and the re-establishment of vegetation for 2 years after completion of operations.

Reviewed by:

Noxious Weed Coordinator

Date